IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Confirmation No.: 4272
Bhavesh Mehta, et al.	Group Art Unit No.: 3622
Serial No.: 10/648,599	Examiner: Jeffrey D. Carlson
Filed on: August 25, 2003	

For: SELECTING AMONG ADVERTISEMENTS COMPETING FOR A SLOT ASSOCIATED WITH ELECTRONIC CONTENT DELIVERED OVER A NETWORK

Via EFS-Web
Commissioner for Patents
P. O. Box 1450
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APPEAL BRIEF

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed February 24, 2010 and in response to the Notice of Panel Decision from Pre-Appeal Brief Review mailed on April 16, 2010.

I. REAL PARTY IN INTEREST

Yahoo! Inc. is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

Appellants are unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Claims 1-20, 29, and 38 have been canceled during prosecution. Claims 21-28 and 30-37 are pending in the application.

Claims 21-28 and 30-37 have been rejected under 35 U.S.C. § 103(a) for allegedly being unpatentable over U.S. Patent Application 2002/0128904 to Carruthers et al. ("*Carruthers*").

It is from this rejection of Claims 21-28 and 30-37 that this Appeal is taken.

IV. STATUS OF AMENDMENTS

The Claims have not been amended after the Final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent Claim 21 is directed towards an approach for determining which advertisements to include with electronic content delivered to users over a network. According to the approach of Claim 21, a plurality of contacts are accepted, each of which is associated with an advertisement, delivery obligations of the advertisement, delivery criteria of the advertisement, and an advertiser. The plurality of contracts includes a first contract and a second contract. The second contract is accepted after the first contract. The delivery obligations associated with the second contract are such that fulfillment of the second

contract would likely prevent the delivery obligations associated with the first contract from being fulfilled. (See paragraph 24).

A request to provide, over the network, a piece of electronic content that includes a slot for an advertisement is received from a user (See step 102 of FIG. 1 and paragraph 27). The piece of electronic content has a subject, which is an attribute of the slot that is included in the piece of electronic content (see paragraph 8).

In response to receiving the request, delivery criteria associated with the plurality of contracts is determined (see paragraph 4). Slot attributes of the slot are compared with the delivery criteria of the plurality of contracts to determine a subset of the plurality of advertisements that qualify for inclusion in the slot (see paragraph 27). The subject of the piece of electronic content is one of the slot attributes compared with the delivery criteria (see paragraph 8). Both a first advertisement associated with the first contract and a second advertisement associated with the second contract qualify for inclusion in the slot (see paragraph 29). The second contract is associated with a behindness value that is currently greater than a behindness value associated with the first contract. The behindness value reflects how far behind a content provider is on satisfying the delivery obligations associated with each contract (see paragraph 13).

From the subset of advertisements, the first advertisement is selected to include in the slot based, at least in part, on the first contract having been formed before the second contract. The first advertisement is inserted into the slot to create a modified piece of electronic content. As a response to the request, the modified piece of electronic content is delivered to the user (see paragraph 32).

VI. SOLE GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 21-28 and 30-37 stand rejected under 35 U.S.C. § 103(a) for allegedly being unpatentable over *Carruthers*.

VII. ARGUMENTS

Claims 21-28 and 30-37 stand rejected under 35 U.S.C. § 103(a) for allegedly being unpatentable over *Carruthers*. However, each pending claim features one or more elements that are not disclosed, taught, or suggested by, or obvious in light of, *Carruthers*.

A. CLAIM 21

Claim 21 recites:

> A method for determining which advertisements to include with electronic content delivered to users over a network, the method comprising the steps of:
> **after accepting a first contract with a first advertiser, accepting a second contract with a second advertiser;**
> **wherein the delivery obligations associated with the second contract are such that fulfillment of the second contract would likely prevent the delivery obligations associated with the first contract from being fulfilled;**
> storing data that indicates delivery criteria and delivery obligations for each of a plurality of contracts, wherein each contract is associated with an advertiser of a plurality of advertisers,
> wherein the plurality of contracts includes the first contract and the second contract;
> wherein the plurality of advertisers includes the first advertiser and the second advertiser;
> wherein each contract of the plurality of contracts is associated with a separate advertisement of a plurality of advertisements;
> **after the plurality of contracts have been formed, receiving, from a user, a request to provide over said network a piece of electronic content that includes a slot for an advertisement;**
> wherein the piece of electronic content has a subject;
> wherein the subject of the piece of electronic content is an attribute of the slot that is included in the piece of electronic content;
> **in response to receiving the request:**
> reading said data to determine delivery criteria associated with the plurality of contracts;

comparing slot attributes of said slot in the requested electronic content with delivery criteria of said plurality of contracts to determine a subset of said plurality of advertisements which qualify for inclusion in said slot, wherein the subject of the piece of electronic content is one of the slot attributes compared with the delivery criteria,

wherein both a first advertisement associated with the first contract and a second advertisement associated with the second contract qualify for inclusion in said slot,

wherein the second contract is associated with a behindness value that is currently greater than a behindness value associated with the first contract,

wherein the behindness value of each contract reflects how far behind a content provider is on satisfying the delivery obligations associated with each contract; and

from said subset of advertisements, selecting said first advertisement to include in the slot based, at least in part, on the first contract having been formed before the second contract;

inserting said first advertisement into the slot to create a modified piece of electronic content;

delivering, as a response to the request, the modified piece of electronic content to the user;

wherein the steps of receiving, reading, comparing, selecting, inserting, and delivering are performed on one or more computing devices. (emphasis added)

At least the above-bolded elements of Claim 21 are not disclosed, taught, suggested, or made obvious by *Carruthers*.

Although *Carruthers* and the method recited in Claim 1 are both directed to how to select advertisements, at least some of which will be ultimately displayed to a user, *Carruthers* and Claim 21 are considerably different. The following are significant features of Claim 21 that *Carruthers* fails to disclose:

1) Accepting a second contract after accepting a first contract even though fulfillment of the second contract would likely prevent the delivery obligations of the first contract from being fulfilled;
2) Selecting a first advertisement instead of a second advertisement even though the second advertisement is "more behind" than the first advertisement;

3) The time of contract formation is a factor in determining which advertisement to select for display;
4) An advertisement is selected, from among a plurality of advertisements, in response to a user request for electronic content;
5) User-requested electronic content includes a slot into which an advertisement is to be placed;
6) The slot includes slot attributes and the slot attributes are compared with the delivery criteria associated with multiple contracts;
7) The subject of the requested electronic content is one of the slot attributes compared with the delivery criteria;
8) An advertisement is inserted into the slot to create a modified piece of electronic content; and
9) The modified piece of electronic content is delivered to the user as a response to the initial request.

Unsatisfied limitations #1-2 are related to how contracts are accepted, unsatisfied limitations #3-7 are related to how advertisements are selected for display to a user, and unsatisfied limitations #8-9 are related to how an advertisement is modified and what is delivered to the user.

One scenario known in the art of online advertising is the scenario of choosing, once a number of contracts with advertisers have been made, which advertisement to place into a slot. A slot is a portion of electronic content (e.g., a webpage) into which an advertisement may be placed. (As noted above and discussed in more detail below, *Carruthers* does not teach or suggest that user-requested electronic content includes a slot into which an advertisement may be placed. Instead, *Carruthers* employs an entirely different scheme for delivering advertisements to users.) To help in determining which advertisement to select for a particular slot, each ad contract is associated with a behindness measure that indicates how far behind a content provider is on satisfying the delivery obligations associated with the

contract. One common way to determine which advertisement to select, from among a plurality of advertisements that are "competing" (or are candidates) for a slot, is to select the advertisement with the greatest (or largest) behindness measure. This is referred to as the "most-behind-first" approach.

Although popular, the most-behind-first approach can suffer from a significant drawback, which is identified by the inventors of the subject application. That drawback is that the most-behind-first approach can be exploited by latecoming advertisers. That exploitation is as follows: a particular advertiser (or "latecomer") may be interested in advertising in slots that are already subject to several pre-existing obligations with one or more other advertisers. If the latecomer becomes aware of the pre-existing obligations, then the latecomer may contract for a much higher delivery obligation than the latecomer actually desires. The consequence of such a contract could be to significantly reduce the number of slots assigned to the previously-contracted advertisers, while potentially giving the latecomer advertiser exactly the number of slots the latecomer actually desires. This problem is referred to herein as the "latecomer problem."

The way *Carruthers* solves the latecomer problem is fundamentally different than how the technique recited in Claim 21 solves the problem. Specifically, *Carruthers* avoids this problem of allowing latecomers to squeeze out prior orders by (a) predicting whether each later order can be filled without affecting prior orders, and (b) rejecting later orders that cannot be filled without affecting prior orders. In situations in which *Carruthers* rejects the orders of latecomers, *Carruthers* also suggests, to the latecomers, changes that can be made to their rejected orders that will make their orders acceptable (see paragraphs 28 and 29). Thus, *Carruthers*' approach can be accurately called a pre-acceptance filtering approach.

The pre-acceptance filtering approach works great in situations where it is possible to estimate, with a reasonable degree of accuracy, which people will be logging into a computer system, and how frequently each of them log into the computer system. *Carruthers*' approach works well for the environment envisioned by *Carruthers* because in that environment advertisements are sent to users that are logged into the system **regardless of the content users are requesting** and viewing. **In contrast**, Claim 21 recites that the advertisements are selected for a user depends on **the subject of the content that the user is requesting**.

Since *Carruthers*' approach works well in the context anticipated by *Carruthers*, there would be no reason to combine *Carruthers*' pre-acceptance filtering approach with an entirely different approach (e.g., the approach described in Claim 21). In other words, because *Carruthers* has already provided a solution to the latecomer problem, it would not make sense to say that one would be motivated to modify *Carruthers* to also provide a completely different solution to the same problem. Further, even if one were somehow motivated to add a second latecomer problem solution to *Carruthers*, there is no reason to believe that they would do so by independently inventing the innovative technique recited in Claim 21.

As noted above, there are several express limitations in Claim 21 (i.e., unsatisfied limitations #1-9) that are not satisfied by *Carruthers*. Many of the limitations missing from *Carruthers* directly relate to the solution (provided by the method of Claim 21) to the latecomer problem that is fundamentally different from *Carruthers*' solution to the latecomer problem. Because there would be no reason to modify *Carruthers* to provide a different solution to the latecomer problem already solved by *Carruthers*, *Carruthers* cannot be said to even suggest a modified system that includes all of these unsatisfied limitations.

1. Carruthers *fails to teach or suggest accepting the recited second contract after accepting the recited first contract (i.e., unsatisfied limitation #1)*

Claim 21 recite, in part:

> after accepting a first contract with a first advertiser, accepting a second contract with a second advertiser;
>
> wherein the delivery obligations associated with the second contract are such that fulfillment of the second contract would likely prevent the delivery obligations associated with the first contract from being fulfilled….

While the Office Actions have focused on what *Carruthers* teaches, they fail to address how those teachings satisfy the claim limitations. For example, in contrast to these express limitations, *Carruthers*' system never accepts a "second contract" whose fulfillment "would likely prevent the delivery obligations associated with the first contract from being fulfilled." The **whole purpose** of *Carruthers*' estimator (Capacity Forecaster 52, the description of which comprises a majority of the Detailed Description) is to predict, **before accepting an ad campaign or contract proposed by an advertiser,** the success of fulfilling the delivery obligations of the ad campaign (see paragraph 28). If Capacity Forecaster 52 predicts that the delivery requirements of an ad campaign will not be fulfilled (e.g., the delivery requirements are too high), then Capacity Forecaster 52 assists the advertiser in changing the requirements of the ad campaign, such as increasing the campaign length, reducing the number of requested impressions, or relaxing the profile constraints (see paragraph 29). By ensuring that the campaign's goals can be met before accepting the campaign (see paragraph 29), the goals of each previously-accepted ad campaign can still be met. Thus, the purpose of *Carruthers*' Capacity Forecaster 52 would be **defeated** if Capacity Forecaster 52 is modified to accept a contract whose fulfillment would likely prevent fulfillment of the delivery

obligations associated with a previously-accepted contract. It is clear error to hold that it would have been obvious to change the **fundamental behavior** of Capacity Forecaster 52 in a manner that **defeats the purpose** of Capacity Forecaster 52.

The Final Office Action asserts that *Carruthers*' system may be modified to accept "late-arriving" advertisers and that such "advertisers would only be served if ad inventory…was plentiful enough to fully serve the advertisers who came before them" (page 2). There are a number of problems with this assertion. First, the legal standard is not whether something **may** be modified, but **whether it would have been obvious to one skilled in the art to perform the modification**. Second, if this proposed modification were implemented, then *Carruthers*' system would have to significantly change in order to have two different types of advertisers: (1) "guaranteed" advertisers whose ad campaigns would be protected from late-arriving advertisers, and (2) "late-arriving" advertisers whose ads will only be displayed if there is extra "inventory" or screen space. Thus, Capacity Forecaster 52 would **not** perform the same function after this proposed modification. According to MPEP § 2143(A), the fact that the function of the prior art would have to be fundamentally modified is **evidence of the claim limitation's non-obviousness**.

Regarding whether it would have been obvious to perform the asserted modification, *Carruthers* **already proposes** multiple solutions for the situation in which there is extra "inventory." For example, paragraph 75 states that a set of default or filler impressions will be displayed when there is no content available for a given user. As another example, paragraph 77 states that *Carruthers*' system will "increase the likelihood of over-delivery (i.e., delivering a greater number of impressions than requested by an advertiser), which is typically favorable to advertisers." Thus, one of ordinary skill in the art at the time of the claimed invention would not have been motivated to pursue a solution to the problem (i.e., of

possibly having extra inventory), for which multiple solutions have already been considered and deemed sufficient.

Even if one of ordinary skill in the art would modify *Carruthers* to have "guaranteed" contracts and "latecomer" (or non-guaranteed) contracts, such a modification would **still** fail to teach or suggest express limitations of Claim 21. Similar to the airline ticket scenario set forth in the Final Office Action where "extra" tickets would only be accepted for boarding after all the guaranteed passengers are assured a seat on the plane, advertisements of latecomers would only be considered after the guaranteed contracts were all fulfilled. In contrast, Claim 21 recites that **both the first advertisement and the second advertisement are determined to qualify for inclusion in a slot**. Even if *Carruthers* did disclose slots (which *Carruthers* does not, as explained in more detail below), the alleged modified *Carruthers* would never determine that both an advertisement of a guaranteed contract and an advertisement of a non-guaranteed contract qualify for inclusion in a slot.

2. *It would not have been obvious to modify* Carruthers *to select, in response to a request for electronic content, a first advertisement over a second advertisement even though the second advertisement is associated with a greater behindness value than the first advertisement (i.e., unsatisfied limitation #2)*

Claim 21 recites, in part:

> after the plurality of contracts have been formed, receiving, from a user, a request to provide over said network a piece of electronic content that includes a slot for an advertisement;
>
> ...
>
> in response to receiving the request:
>
> ...
>
> wherein the second contract is associated with a behindness value that is currently greater than a behindness value associated with the first contract,

> wherein the behindness value of each contract reflects how far behind a content provider is on satisfying the delivery obligations associated with each contract....

According to Claim 21, a first advertisement is selected based on the fact that a first contract (associated with the first advertisement) was formed before a second contract, despite the fact that the second contract has a behindness value that is greater than the first contract. In contrast, *Carruthers* teaches a system where, once contracts are formed, the order in which advertisements are displayed is based **only** on whether the daily goals (or objectives) of each campaign are reached (see paragraphs 32, 34, and 35). Paragraph 35 of *Carruthers* specifically states, "if an advertisement gets behind in meeting its goals, it may be automatically promoted in priority." This is in **direct contrast** to the portion of Claim 21 quoted above that a first advertisement is selected before a second advertisement even though the second advertisement is associated with a greater behindness value than the first advertisement. Because *Carruthers*' system already performs pre-acceptance filtering to solve the latecomer problem, *Carruthers*' system can safely use a behindness measure to select among ads, when some ads fall behind. There would be no reason for *Carruthers* to penalize later contracts, because *Carruthers* has already made sure that those later contracts will **not** likely prevent the delivery obligations associated with any pre-existing contracts from being fulfilled.

The Final Office Action asserts that "ad campaigns of late coming advertisers may be accepted into the system, but would be given lower priority (i.e., placed toward the end of the queue) than earlier-arriving advertisers, even if the latecomers had ad contracts which were more 'behind schedule.'" There are a number of problems with this assertion, some of which

were addressed above with respect to maintaining a list of "guaranteed" contracts separate from a list of "non-guaranteed" contracts.

First, it is unclear to what queue the Final Office Action is referring. *Carruthers* discloses two queues or lists: (1) a master list of advertisements generated by Inventory Manager 51 and provided to On-Demand Scheduler 70 and (2) an individualized list constructed by On-Demand Scheduler 70 based on the master list and a particular user when the particular user logs onto the system. It does not make sense that advertisements from latecomer advertisers would be in either the master list or the individualized list. If that were so, then "guaranteed" advertisers might not have the goals of their respective ad campaigns fulfilled.

According to paragraph 35 of *Carruthers*, "if an advertisement gets behind in meeting its goals, it may be automatically promoted in priority." Thus, the *Carruthers* system treats all ad campaigns the same once they are accepted. If an advertisement "gets behind," then *Carruthers* will "promote" that advertisement by advancing the advertisement towards the beginning of the master list. If multiple advertisements "get behind," then they will all be "promoted" at one time or another. Thus, all ad campaigns might be, e.g., 98% fulfilled. Clearly, *Carruthers* **already considers** the potential problem of advertisements getting behind and implements a solution that *Carruthers* deems sufficient. One of ordinary skill in the art would not consider modifying *Carruthers* to add yet another solution to a problem already addressed and solved by *Carruthers*. Further, in the hypothetical scenario where there is a separate list of "guaranteed" and "non-guaranteed" ad campaigns and where all "guaranteed" ad campaigns are "behind", advertisements of "non-guaranteed" ad campaigns would clearly not be considered.

Secondly, the selection of the recited first advertisement over the recited second advertisement is performed **in response to a request for electronic content**. In contrast, *Carruthers* teaches that a master list and an individualized list are generated **prior to** any request for electronic content. Rather, the master list is generated before a user logs into his/her ISP and the individualized list is generated upon the user logging in.

3. Carruthers *fails to teach or suggest that the time of contract formation, relative to other contract formations, is taken into account when determining which advertisement to place in a slot (see unsatisfied limitation #3)*

Claim 21 recites "from said subset of advertisements, selecting said first advertisement to include in the slot based, at least in part, on the first contract having been formed before the second contract." In contrast, not only does *Carruthers* fail to teach or suggest including an advertisement in a slot (as explained in more detail below), *Carruthers* fails to teach or suggest that the time of when a contract was formed, relative to another contract, is taken into account when determining which advertisement to select. Once *Carruthers* has accepted two contracts, when the contracts were formed is irrelevant to the ad selection process. Indeed, there is no need for *Carruthers* to base its advertisement selection on when a contract was formed, because *Carrutthers*' Capacity Forecaster 52 has already determined that the agreed upon objectives of each accepted ad campaign are achievable.

Furthermore, the delivery of a particular advertisement to a user in *Carruthers* is based on what position in a list of advertisements that particular advertisement appears and whether the user is still logged into the ISP when it is time to display the particular advertisement. Thus, the step of selecting an advertisement in *Carruthers* is **not** in response to a user request for a particular piece of electronic content, as Claim 21 requires (i.e., unsatisfied limitation #4).

The Final Office Action cites paragraph 34 for implying that the time of contract formation could be taken into account when selecting an advertisement for display. The pertinent sentence of paragraph 34 states, "The prioritized content list identifies the order in which advertisements are to be displayed. The order is based preferably both upon priority and some weighting mechanism that indicates how many impressions are needed by each campaign" (emphasis added). Reference here to "priority" has a specific meaning in *Carruthers* and should be read as to include any possible factor that may be used to order a list of advertisments. Claims 1, 24, 38, 39, 42, and 56 of *Carruthers* all state that the list of advertisements is prioritized "to meet delivery requirements," "to generally fulfill said contracts," or "to enhance fulfillment of said contracts." Thus, the "priority" of an advertisement is dictated by whether its corresponding contract is on track to have its delivery requirements met. Again, not only is time of contract formation not considered in *Carruthers* for the purpose of ordering a list of advertisements, *Carruthers*' system fails to consider time of contract formation when it is time to display an advertisement from the list.

4. Carruthers *fails to teach or suggest that electronic content includes a slot for an advertisement (i.e., unsatisfied limitation #5)*

Claim 21 recites "after the plurality of contracts have been formed, receiving a request to provide over said network a piece of electronic content that includes a slot for an advertisement." *Carruthers* fails to teach or suggest that electronic content includes a slot for an advertisement. The Final Office Action equates (on page 3) the recited "slot" with *Carruthers*' "surplus screen real estate." Respectfully, this is incorrect. Surplus screen real estate refers to a user's (or subscriber's) viewing space, **not** to the **electronic content that the user is requesting**.

The Final Office Action asserts (on page 3) that "requested web pages represent advertising opportunities having surplus screen real estate (slots where banners are to be inserted – i.e. at the top or bottom, etc., of the page or where else the page designer desires to include advertising)…." It is respectfully noted that, according to Claim 21, the **content that the user request includes slots**. Reference to "surplus screen real estate" in *Carruthers* does not refer to the content that a user requests, but rather refers to the user's computer display.

5. It would not have been obvious to modify Carruthers *to incorporate the slot-based approach of Claim 21*

As noted above, Claim 21 recites that electronic content includes a slot for an advertisement. Claim 21 further requires that the subject of the electronic content is an attribute of the slot. In response to receiving a request for the electronic content, slot attributes of the slot are compared with delivery criteria of a plurality of contracts to determine a subset of advertisements which qualify for inclusion in the slot. This is referred to hereinafter as the "slot-based approach." According to the slot-based approach, the advertisements that will be displayed to a user are determined (a) after the user requests specific content and (b) based on the subject matter of the content. *Carruthers* fails to teach or suggest using the slot-based approach (i.e., unsatisfied limitations #6-7).

Instead, *Carruthers*' system generates an individualized list of advertisements for a particular user that logs into an ISP by comparing the profiles of advertisements (i.e., the alleged delivery criteria) in the master list with the profile of the particular user. This is referred to hereinafter as the "user/login-based approach." Thus, according to the user/login-based approach, the advertisements to be provided to a user are determined (a) before (as opposed to after) the user requests any content and (b) based on the user's profile (instead of on the subject matter of requested content).

The Final Office Action points to a related application of *Carruthers* (i.e., U.S. Application Serial No. 09/558,755) that states that a user's profile may be based on "the current Web browsing session." In other words, the Final Office Action alleges that it is possible for a user's profile to be updated during a session to reflect the subject of the content that the user is requesting. However, even if this was true, *Carruthers* would still fail to teach or suggest that user-requested content has a slot into which an advertisement may be inserted. Therefore, *Carruthers* necessarily fails to teach or suggest that the attributes of a slot are compared to the delivery criteria of a plurality of contracts, as Claim 21 requires.

Further, even if such "on-the-fly" modification of a user's profile (i.e., modifying the user's profile based on the content that the user is currently viewing) was to occur, the sequence of the advertisements in the user's current session would not change. Instead, the next time the user logs into the ISP, a new user-specific list of advertisements would be constructed based on the revised profile. Thus, while the list of advertisements provided to a user in *Carruthers* may reflect the subject of what a user requested **in previous sessions**, that list of advertisements is never guaranteed to reflect the subject matter of content the user is currently requesting, especially since the list of advertisements is generated **before a user requests any content**. Instead, as noted above, *Carruthers* states that the individualized list is generated when a user logs into an ISP. There is no indication that the individualized list is modified during the user's session. If the content of the webpage dictated the advertisements that would be delivered to a particular user, then *Carruthers*' On-Demand Scheduler 70 would be **worthless** along with the individualized list that Schedule 70 generates. Because Scheduler 70 (i.e., one of the primary components of *Carruthers*' system) would be rendered completely unnecessary by the proposed modification, it would not have been obvious to

combine the user/login-based approach of *Carruthers* with the slot-based approach of Claim 21.

In the "Response to Arguments" section, the Final Office Action asserts "it would have been obvious…to have inspected the user profile or inspected the current page at any time or re-ordered the ad queue at any time, including for each advertising opportunity so that an ad can be operably targeted to the current page content as desired by the incorporated material." Even if it was obvious, in the abstract, to provide advertisements that are related in subject matter to the content a user is currently viewing, the approach of *Carruthers* does **not** allow for this to occur because the content that a user specifically requests does **not include slots**. That is why *Carruthers* discloses an approach where ads are determined for a user when the user logs into an ISP (i.e., before the user requests any content), **not** when the user requests specific content. Thus, in *Carruthers*, there is a correspondence between advertisements and users while, in Claim 21, there is a correspondence between advertisements and specific requested electronic content (e.g., webpages) that share similar subject matter as the advertisements. *Carruthers* system assumes (perhaps reasonably) that a user's previous interest in certain types of content will correspond to the user's interest in the same type of content in the future. Based on this assumption and the advertising model (i.e., the user/login-based approach) upon which *Carruthers*' system is based, there is no reason for *Carruthers* system to change and adopt a different advertising model (i.e., the slot-based approach).

Further, if advertisements were targeted to the specific content a user requested, then *Carruthers*' Capacity Forecaster 52 **would also have to change drastically** by speculating which content users might be requesting in the future. One of ordinary skill in the art would appreciate that gradual changes in users' profiles would not significantly alter *Carruthers*'

advertisement delivery system's ability to fulfill the delivery obligations of each accepted contract. However, one of ordinary skill in the art would also appreciate that basing the selection of an advertisement on the subject matter of the requested content would require **significant changes** to *Carruthers*' system. Therefore, it would not have been obvious to modify *Carruthers*' system to include a slot-based approach.

One reason why *Carruthers*' estimation approach can be relatively accurate is because *Carruthers* takes into account only what is known about users at a particular time, such as which sites the users have visited and how long the users have been logged on. *Carruthers* does **not** need to know what users will be viewing in the future, which is very difficult to predict. For example, even if it is known that user A frequents sports websites, user A could look at nothing but politics sites during a particular session due to a recent, significant political event. Although it may be preferable to deliver advertisements to users who are viewing webpages that share the same subject matter as the advertisements, such a change could not have been made without **significantly altering** *Carruthers*' Capacity Forecaster 52. In fact, it is unclear what new factors and equations would have to be taken into account by Capacity Forecaster 52 in order to predict what users will be viewing in the future. Simply asserting that it would have been obvious to modify *Carruthers*'s user/login-based approach to employ the slot-based approach of Claim 21 is much different than describing how *Carruthers* system would have to change. Because it is unclear how *Carruthers*' Capacity Forecaster 52 would have to change in order for *Carruthers*' system to incorporate the slot-based approach (about which the Final Office Action is silent), Applicants respectfully submit that it would not have been obvious to so modify *Carruthers*.

6. Carruthers *fails to teach or suggest that the inserting and delivering steps of Claim 21*

Claim 21 recites that the first advertisement is inserted into the slot to create a modified piece of electronic content. Because the electronic content in *Carruthers*' system does not include slots, it naturally follows that *Carruthers*' system does **not** (a) create modified pieces of electronic content by inserting ads into those slots (i.e., unsatisfied limitation #8) or (b) deliver the modified pieces of electronic content to the user (i.e., unsatisfied limitation #9).

B. CLAIM 30

Claim 30 is an independent claim that recites the limitations of Claim 21 that were discussed above. Claim 30 is therefore patentable over *Carruthers* for at least the same reasons given above for Claim 21.

C. CLAIMS 22-28 AND 31-37

Claims 22-28 and 31-37 are dependent claims, each of which depends (directly or indirectly) on one of Claims 21 or 30. Each of Claims 22-28 and 31-37 is therefore patentable over *Carruthers* for at least the same reasons given above for the claim on which it depends.

D. CONCLUSION AND PRAYER FOR RELIEF

The rejection to Claims 21-28 and 30-37 under 35 U.S.C. § 103(a) lack the requisite factual and legal basis. Appellants respectfully submit that the imposed rejection to Claims 21-28 and 30-37 under 35 U.S.C. § 103(a) are not viable and respectfully solicit the Honorable Board to reverse each of the imposed rejection made under 35 U.S.C. § 103(a).

Respectfully submitted,

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VIII. CLAIMS APPENDIX

1-20. (Canceled)

21. (previously presented) A method for determining which advertisements to include with electronic content delivered to users over a network, the method comprising the steps of:

after accepting a first contract with a first advertiser, accepting a second contract with a second advertiser;

wherein the delivery obligations associated with the second contract are such that fulfillment of the second contract would likely prevent the delivery obligations associated with the first contract from being fulfilled;

storing data that indicates delivery criteria and delivery obligations for each of a plurality of contracts, wherein each contract is associated with an advertiser of a plurality of advertisers,

wherein the plurality of contracts includes the first contract and the second contract;

wherein the plurality of advertisers includes the first advertiser and the second advertiser;

wherein each contract of the plurality of contracts is associated with a separate advertisement of a plurality of advertisements;

after the plurality of contracts have been formed, receiving, from a user, a request to provide over said network a piece of electronic content that includes a slot for an advertisement;

wherein the piece of electronic content has a subject;

wherein the subject of the piece of electronic content is an attribute of the slot that is included in the piece of electronic content;

in response to receiving the request:

reading said data to determine delivery criteria associated with the plurality of contracts;

comparing slot attributes of said slot in the requested electronic content with delivery criteria of said plurality of contracts to determine a subset of said plurality of advertisements which qualify for inclusion in said slot, wherein the subject of the piece of electronic content is one of the slot attributes compared with the delivery criteria,

wherein both a first advertisement associated with the first contract and a second advertisement associated with the second contract qualify for inclusion in said slot,

wherein the second contract is associated with a behindness value that is currently greater than a behindness value associated with the first contract,

wherein the behindness value of each contract reflects how far behind a content provider is on satisfying the delivery obligations associated with each contract; and

from said subset of advertisements, selecting said first advertisement to include in the slot based, at least in part, on the first contract having been formed before the second contract;

inserting said first advertisement into the slot to create a modified piece of electronic content;

delivering, as a response to the request, the modified piece of electronic content to the user;

wherein the steps of receiving, reading, comparing, selecting, inserting, and delivering are performed on one or more computing devices.

22. (previously presented) The method of Claim 21, wherein:

the method further comprises the step of determining which advertisements in the plurality of advertisements are associated with delivery obligations that are not on track to be satisfied; and

the step of determining a subset of said plurality of advertisements which qualify for inclusion in said slot includes selecting for said subset only advertisements that are associated with delivery obligations that are not on track to be satisfied.

23. (previously presented) The method of Claim 21, wherein the step of comparing slot attributes of said slot with delivery criteria of said contracts to determine a subset of said plurality of advertisements which qualify for inclusion in said slot is performed in response to receiving said request.

24. (previously presented) The method of Claim 23, wherein:

the request was made by a specific user; and

at least one of said slot attributes, which are used to determine which advertisements qualify for inclusion in said slot, corresponds to information associated with the specific user.

25. (previously presented) The method of Claim 21, wherein the piece of electronic content is a web page.

26. (previously presented) The method of Claim 21, wherein the piece of electronic content is a video stream.

27. (previously presented) The method of Claim 21, further comprising the steps of:

associating a priority class with each of said plurality of advertisements; and

filtering out of said subset one or more advertisements that have a priority class that is lower than the priority class of any other advertisement that belongs to said subset.

28. (previously presented) The method of Claim 21, further comprising the step of filtering out of said subset all advertisements that are associated with delivery obligations that are on track to be satisfied.

29. (canceled)

30. (previously presented) A computer-readable storage medium storing instructions for determining which advertisements to include with electronic content delivered to users over a network, which instructions, when executed by one or more processors, causes the one or more processors to perform the steps of:

after accepting a first contract with a first advertiser, accepting a second contract with a second advertiser;

wherein the delivery obligations associated with the second contract are such that fulfillment of the second contract would likely prevent the delivery obligations associated with the first contract from being fulfilled;

storing data that indicates delivery criteria and delivery obligations for each of a plurality of contracts, wherein each contract is associated with an advertiser of a plurality of advertisers,

wherein the plurality of contracts includes the first contract and the second contract;

wherein the plurality of advertisers includes the first advertiser and the second advertiser;

wherein each contract of the plurality of contracts is associated with a separate advertisement of a plurality of advertisements;

after the plurality of contracts have been formed, receiving, from a user, a request to provide over said network a piece of electronic content that includes a slot for an advertisement;

wherein the piece of electronic content has a subject;

wherein the subject of the piece of electronic content is an attribute of the slot that is included in the piece of electronic content;

in response to receiving the request:

reading said data to determine delivery criteria associated with the plurality of contracts;

comparing slot attributes of said slot in the requested electronic content with delivery criteria of said plurality of contracts to determine a subset of

said plurality of advertisements which qualify for inclusion in said slot, wherein the subject of the piece of electronic content is one of the slot attributes compared with the delivery criteria,

wherein both a first advertisement associated with the first contract and a second advertisement associated with the second contract qualify for inclusion in said slot,

wherein the second contract is associated with a behindness value that is currently greater than a behindness value associated with the first contract,

wherein the behindness value of each contract reflects how far behind a content provider is on satisfying the delivery obligations associated with each contract; and

from said subset of advertisements, selecting said first advertisement to include in the slot based, at least in part, on the first contract having been formed before the second contract;

inserting said first advertisement into the slot to create a modified piece of electronic content;

delivering, as a response to the request, the modified piece of electronic content to the user.

31. (previously presented) The computer-readable storage medium of Claim 30, wherein:

the instructions include instructions which, when executed by the one or more processors, further cause the one or more processors to perform the step of

determining which advertisements in the plurality of advertisements are associated with delivery obligations that are not on track to be satisfied; and

the step of determining a subset of said plurality of advertisements which qualify for inclusion in said slot includes selecting for said subset only advertisements that are associated with delivery obligations that are not on track to be satisfied.

32. (previously presented) The computer-readable storage medium of Claim 30, wherein the instructions include instructions which, when executed by the one or more processors, further cause the one or more processors to perform the step of comparing slot attributes of said slot with delivery criteria of said contracts to determine a subset of said plurality of advertisements which qualify for inclusion in said slot is performed in response to receiving said request.

33. (previously presented) The computer-readable storage medium of Claim 32, wherein:

the request was made by a specific user; and

at least one of said slot attributes, which are used to determine which advertisements qualify for inclusion in said slot, corresponds to information associated with the specific user.

34. (previously presented) The computer-readable storage medium of Claim 30, wherein the piece of electronic content is a web page.

35. (previously presented) The computer-readable storage medium of Claim 30, wherein the piece of electronic content is a video stream.

36. (previously presented) The computer-readable storage medium of Claim 30, wherein the instructions include instructions which, when executed by the one or more processors, further cause the one or more processors to perform the steps of:

associating a priority class with each of said plurality of advertisements; and

filtering out of said subset one or more advertisements that have a priority class that is lower than the priority class of any other advertisement that belongs to said subset.

37. (previously presented) The computer-readable storage medium of Claim 30, wherein the instructions include instructions which, when executed by the one or more processors, further cause the one or more processors to perform the step of filtering out of said subset all advertisements that are associated with delivery obligations that are on track to be satisfied.

38. (canceled)

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.